

Appendix: Supplementary Online Material

Descriptive Statistics

Table [A.1](#) provides descriptive statistics of the variables employed in the regression analysis in Table 3 in the main text.

Table A.1. Descriptive statistics of the variables used in the regression analyses presented in Table 3.

Variable	N	Mean	S.D.	Min.	Max.
Run	11,804	.83	.38	0	1
DC Pension	11,804	.10	.30	0	1
DB Pension	11,804	.81	.39	0	1
Vested	11,804	.57	.49	0	1
Immediate	11,804	.40	.49	0	1
Delayed	11,804	.17	.38	0	1
Rate (%)	11,804	1.88	1.19	0	5
Accrued ^a	11,779	.19	.23	0	1
Office	11,804	.18	.39	0	1
Government	11,804	.54	.50	0	1
Past Office	11,804	.13	.34	0	1
Entry Age	11,399	44.01	9.48	19	91
Sex ^b	11,804	.11	.31	0	1
Annual Salary (\$1,000s) ^c	11,734	82.30	33.72	5.44	138.73
Margin (%)	11,757	19.28	15.19	0	100
Service (Years)	11,804	8.19	5.95	.08	46.92

^a *Accrued* measures the proportion of the MP's salary that is accumulated in the MP's DB pension up to time t . *Accrued* is 0 for MPs who are not enrolled in DB pensions.

^b Female MPs are coded 1.

^c Salary is measured in real terms with 2002 as the base year. The CPI was based on Statistics Canada Table: 18-10-0007-01 (<https://doi.org/10.25318/1810000701-eng>)

Description of legislative pension regimes

Canadian House of Commons

Establishment: DB pensions were adopted in 1952 and came into effect in August 1953. Serving MPs were allowed to buy into the new DB pension plan.

Vesting: Between 1953 and 1980 MPs vested in the pension plan by securing a second term of office. No minimum period of service was attached to this requirement. In 1980, the vesting rules were changed to make vesting dependent on six years of service in the House of Commons. Given that the maximum inter-election period is five years, the new rules effectively made vesting contingent on re-election plus a minimum of six years of service.

Eligibility: Between 1953 and 1994, the rules were such the MPs were eligible to receive their full pensions without penalty immediately on exiting the House. There was no minimum age or length of service requirement. In 1994, the eligibility rules were changed such that MPs had to be 55 years or older in order to collect their full pensions without penalty.

Accrual rates and limits: Accrual rates and limits were adjusted three times. Between 1953 and 1980, pensions accrued at 3 percent of the average of the MP's best five year's salary to a maximum of 75 percent. Accordingly, MPs maximized their pensions only after 25 years of service. Between 1981 and 1994, the accrual rate was increased to 5 percent of the MP's best three year's average annual salary. The 75 percent limit was left intact. Under these rules, federal MPs maximized their pensions after just 15 years of service. In 1994, the accrual rates were once again lowered to 3 percent. Contribution rates were revised in 2012, but the accrual rates and limits remained unchanged.

Ontario Legislative Assembly

Establishment: DB pensions were established in June 1959. As in the House of Commons, incumbents were given the option to buy into the pension plan. We assume that all of them did so because it represented a financial windfall. The DB pension plan was abolished with retroactive effect on 8 June 1995, and replaced by a DC pension system.

Vesting: Between June 1953 and 23 July 1968, the vesting requirement was 10 years of service. Given that legislative terms typically lasted four years, this requirement effectively meant the Ontario MPs had to secure re-election twice in order to vest. After 23 June 1968, and until DB pensions were abolished in 1995, the vesting requirement was reduced to 5 years of service.

Eligibility: Ontario MPs became eligible to receive their DB pensions without penalty at age 55. This eligibility requirement was maintained in the DC pension system.

Accrual rates and limits: DB pensions accrued at 3 percent of the MP's best six year's average annual salary to a maximum of 75 percent.

Conversion to DC Pensions: The conversion to DC pensions was retroactive, with some aspects of the Legislative Assembly Retirement Allowances Act repealed on 1 January 1992, and others on 8 June 1995, when the *MPPs' Pension and Compensation Reform Act, 1996* came into force. The key aspects of this conversion were as follows. MPs who were vested in the DB pension plan and re-elected at the 1995 election had their benefits paid out as a lump sum, commuted to the new DC plan, or paid into personal locked-in retirement accounts as the MP chose. For most MPs, the last option would have been the most attractive. The key point, however, is that any DB pension benefits accumulated up to June 1995 thereafter ceased to accrue value. MPs who were unvested as of June 1995 (i.e., who had not accumulated 5 years of service by that date) were straightforwardly converted into the DC plan in 1995.

Saskatchewan Legislative Assembly

Establishment: DB pensions came into effect in 1954. As with the plans described above, sitting MPs had the option of buying into the plan for past years of service; we assume that all did so. The DB plan was replaced by a DC pension system on 30 September 1978.

Vesting: From the plan's establishment until 16 April 1965 the vesting requirement was 3 years of legislative service. Between 17 April 1965 and 30 June 1974, the vesting requirement was amended to 10 years of service. As of 1 July 1974, the vesting period was reduced to 8 years of service.

Eligibility: MPs were eligible to collect their DB pensions without penalty at age 55.

Accrual rates and limits: Until 30 June 1974, pensions accrued value at a rate of 2 percent of the MP's annual salary, up to maximum of 40 percent. After 30 June 1974, and until the DB pension system was abolished on 30 September 1978, the accrual rate was increased to 3 percent and the limit increased to 60 percent of the MP's annual salary.

Conversion to DC Pensions: MPs who were elected after 1 October 1978, or who were unvested in the erstwhile DB pension system were enrolled in the DC pension plan. In contrast, sitting MPs who were vested in the DB pension system were grandfathered into their DB pensions. We understand these rules as meaning that the pensions of MPs who were vested in the DB pension plan as of 30 September 1978 continued to accrue value after that date.

Manitoba Legislative Assembly

Establishment: The Manitoba assembly established a DB pension plan for its legislators in June 1966. This original DB plan was replaced by a DC pension plan on 25 April 1995. That DC pension plan was in turn replaced when a DB pension scheme was re-adopted by the legislature in April 2005.

Vesting: Between 1966 and 1973, Manitoba MPs vested in the DB pension plan on securing re-election to a third term of office. No length of service was stipulated in addition to this requirement, but given that the inter-election term was four years, and that single-party majority governments were the norm, the three-term vesting requirement functionally demanded 8 years of service. This was tacitly recognized when the vesting requirement was altered in June 1973 to be re-election to a third term or 8 years of service. This requirement remained in place until the DB plan was abolished in 1995, and it was revived when DB pensions were restored in 2005.

Eligibility: From the time the DB pension plan was first established to June 1979, Manitoba MPs who were vested in the plan were eligible to collect their pensions without penalty at 50 years of age. Given an average entry age in the mid- to late-forties, this rule left many MPs immediately eligible to collect their pensions without penalty. In July 1979, the eligibility requirement was changed such that the MPs age plus years of service had to be 55 years or above. This criterion was maintained when DB pensions were re-established in 2005.

Accrual rates and limits: The first DB pension plan, in effect between 1966 and 1995, offered MPs an accrual rate of 3 percent per annum up to a maximum of 70 percent of their average annual salary. The DB pension plan that was established in 2005 following the abolition of DB pensions offered a lower accrual rate of 2 percent per annum up to a maximum of 70 percent of the MP's average annual salary. The length of service necessary to achieve a maximum pension thus increased from 23 to 35 years.

Conversion to and from DC Pensions: When the legislative pension plan was converted from a DB to DC basis in 1995, the enacting legislation stipulated that sitting members who were vested in the erstwhile DB pension as of the dissolution of 30 March 1995 could not accumulate more years of pensionable service, but that additional legislative service (i.e., after 30 March 1995) would count toward their eligibility. These vested members were therefore grandfathered into their DB pensions, but the accrued value of those pensions was capped as of 1 April 1995. Unvested MPs saw their DB contributions converted to DC pensions. When DB pensions were revived in 2005, sitting members were allowed to purchase pensionable service for any legislative service after 25 April 1995 using their contributions to the DC plan. The legislation prohibited long-serving MPs who possessed DB pensions from the earlier period from acquiring an additional DB pension under the post-2005

arrangements. We assume that all MP bought themselves into DB pensions when they were reinstated in 2005; doing so brought MPs a financial windfall relative to their DC pensions.

British Columbia Legislative Assembly

Establishment: The BC legislature established a DB pension scheme for its legislators in 1955. In June 1996, this DB plan was abolished and replaced by a DC plan. The latter was in turn abolished in April 2007, when DB pensions were reinstated.

Vesting: The vesting requirement between 1955 and 1971 was 7 years of service. Between 1972 and 1996, the vesting requirement was changed to 7 years of service or service in 3 terms. When DB pensions were reinstated in 2007, the vesting requirement was reduced to 6 years of service.

Eligibility: Under the first DB pension plan, BC MPs became eligible to collect their pensions without penalty when they attained 55 years of age or when their age plus years of service weakly exceeded 60 years. The DB plan that was established in 2007 required MPs to be 65 years of age before they could collect their pensions without penalty.

Accrual rates and limits: Between 1972 (when our data start) and 1979, DB pensions accrued at 4 percent per annum to a limit of 72 percent of the MPs best three-year average annual salary. In 1979, the accrual rate increased to 5 percent per annum to a maximum of 80 percent of the MPs best three-year average annual salary. When DB pensions were reinstated in 2007, the accrual rate was set to 3.5 percent of the MP's best three-year average annual salary to a limit of 70 percent.

Conversion to and from DC Pensions: When BC canceled its DB pension plan benefits accumulated to June 1996 were grandfathered, and not merely commuted, i.e., those vested in the DB plan saw their pensions continue to accrue value. However, MPs who were not vested in the DB pension plan by that date saw their contributions converted to DC pensions. When DB pensions were reinstated in 2007, sitting MPs were given the option to buy into the new DB pension plan. Communication with a member of the legislative press corps indicated that all sitting MPs chose to do so (Mr. Vaughn Palmer [personal communication 14 October 2020]).

Quebec National Assembly

Establishment: The Quebec National Assembly adopted DB pensions for its members in 1958. Serving MPs were allowed to buy into the new DB pension plan. As our Quebec data start in October 1973, fifteen years after DB pensions were adopted, we assume that all Quebec MPs in our data set were enrolled in the pension plan. Significant revisions to the terms of the pension plan were effected in 1983 and 1992, but the DB basis of the plan was always maintained.

Vesting: Until 1982, MPs vested in the pension plan on serving 60 months *and* two terms, i.e., the MP had to win re-election at least once in 5 years of service. The plan was overhauled in 1983 such that MPs elected after 1 January 1983 were immediately vested in the pension plan, with those first elected before 1 January 1983 remaining subject to the “60 months *and* two terms” vesting requirement. The 1992 revisions did not alter these vesting rules.

Eligibility: Under the original rules, MPs were eligible to receive their full pensions without penalty immediately on exiting the legislature. There was no minimum age or length of service requirement. These rules were amended in 1983 such that MPs had to be 60 years or older in order to collect their full pensions without penalty. (MPs could collect a pension as early as age 55, but with the pension reduced by .25 percent for each month prior to their sixtieth birthday.)

Accrual rates and limits: The original terms of the plan stipulated an accrual rate of .78125 percent per month, up to a maximum of 75 percent of the MP’s total *contributions* to the pension plan (and, not as in other provinces, to the MP’s average salary). MP contributed 8 percent of their salaries annually. Thus on vesting after 5 years of service, the MP’s pension was computed on a contributory base of 40 percent of their average annual salary, i.e., 5 years service \times 8 percent per annum. This contributory base offered the MP a pension of 18.75 percent of the MP’s average salary after 5 years (60 months) of service, i.e., $.40 \times 60 \times .78125 = 18.75$ percent. Because the contributory base on which the MP’s pension increased with the MP’s tenure (i.e., at 8 percent per year up to 8 years of service), so too did the accrual rate of the pension. Our calculations show that Quebec MPs in this pension regime enjoyed an average accrual rate 4.75 percent. That is the figure we employ in our data analysis.

The 1983 revisions changed the accrual rate to 4 percent per year up to a maximum of 70 percent of the MP’s best three year’s average annual salary. The pension was thus maximized after 17.5 years (210 months) of service. (MPs first elected before 1 January 1983 remained subject to the old accrual rate and limit, i.e. .78125 percent per month, up to a maximum of 75 percent of contributions.)

The 1992 revisions were more radical. First, accrual rates were changed to 1.75 percent of an MP’s annual salary for a maximum of 25 years. Pensions were thus implicitly capped at $1.75 \times 25 = 43.75$ percent of the MP’s annual salary.¹ This represented a substantial reduction relative to the 1983-1992 terms. Second, the 1992 revisions capped the existing pensions of *all* sitting MPs as of 31 Dec 1991; *all* MPs were then enrolled under the 1992 terms. MPs who qualified for pensions under the pre-1983 or pre-1992 terms thus qualified for two pensions: one pension (now capped) that was defined by terms

¹ Finding no evidence of the 1993 legislation changing the benchmark salary on which this calculation was based, we assume that the benchmark of the MP’s best three year’s average annual salary was retained.

that existed when the MP first vested in the legislative pension plan, and another that was defined under the post-1992 terms.

Sources

Legislation:

- An Act to amend the Members of Parliament Retiring Allowances Act, 60-61 Elizabeth, Chapter 22 (<https://www.parl.ca/DocumentViewer/en/41-1/bill/C-46/royal-assent/page-27# 1>).
- The Legislative Assembly Retirement Allowances Act, 1970, Chapter 241, Revised Statutes of Ontario; MPPs Pension and Compensation Reform Act, 1996 (<https://www.ola.org/en/legislative-business/bills/parliament-36/session-1/bill-42>).
- An Act Respecting the Members of the Assembly, Legislative Assembly Retirement Allowances Act, 1960, Chapter 58, Revised Statutes of Ontario.
- The Members of the Legislative Assembly Superannuation Act, 1965, Chapter 6, Revised Statutes of Saskatchewan.
- The Legislative Assembly Superannuation Act, 1973-74, Chapter 63, Revised Statutes of Saskatchewan.
- The Legislative Assembly Act, Continuing Consolidation of the Statutes of Manitoba, Chapter L110 (especially S 69.2) (<https://web2.gov.mb.ca/laws/statutes/ccsm/l110e.php>);
- Members' Remuneration and Pensions Act, 1996. Chapter 257, Revised Statutes of British Columbia, (https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/96257_01# part3).
- Act respecting the conditions of employment and the pension plan of the Members of the National Assembly. Chapter C-52.1, Consolidated Statutes and Regulations of Quebec. (<https://www.legisquebec.gouv.qc.ca/en/document/cs/C-52.1>).

Reports and other sources:

- Chan, Randall. 1981. "Pension plans for Canadian legislators." *Canadian Parliamentary Review* 4(4): 29-36;
- Blais, Jean-Jaques. 1998. *Commission to review allowances of Members of Parliament*. Ottawa: Minister of Public Works and Government Services ISBN 0-662-63315-6 Catalogue No. CP 32-61/1997 (https://publications.gc.ca/collections/collection_2016/bcp-pco/CP32-61-1997-2-eng.pdf).
- Marleau, Robert and Camille Montpetit, eds. 2000. *House of Commons Procedure and Practice* (<https://www.ourcommons.ca/marleaumontpetit/DocumentViewer.aspx?DocId=1001&Sec=Ch04&Seq=13&Language=E>).
- Osborne, Hon. Coulter A. 2001. *Report of the Honourable Coulter A. Osbourne, Integrity Commissioner, MPP Compensation Reform Act (Arm's length process), 2001*. Toronto: Legislative

Assembly of Ontario (<https://www.oico.on.ca/docs/default-source/annual-reports/annual-report-2001---2002.pdf?sfvrsn=4>).

- Backman, Earl E. 2004. *Commissioner for MLA Pay, Allowances and Retirement Benefits, Report to the Legislative Assembly of Manitoba*. Winnipeg: Manitoba Legislative Assembly (<http://www.reviewcommissioner.mb.ca/report04.pdf>).
- Green, Hon. J. Derek. 2007. *Report of the Review Commission on Constituency Allowances and Related Matters*. St. Johns: Government of Newfoundland and Labrador (<https://www.gov.nl.ca/publicat/greenreport/>).
- Werier, Michael D. 2012. *Report of the Commissioner of Salaries, Allowances and Retirement Benefits for Members of the Manitoba Legislative Assembly*. Winnipeg: Manitoba Legislative Assembly (<http://www.reviewcommissioner.mb.ca/report12.pdf>);
- Werier, Michael D. 2017. *Report of the Commissioner of Salaries, Allowances and Retirement Benefits for Members of the Manitoba Legislative Assembly*. Winnipeg: Manitoba Legislative Assembly. (<http://www.reviewcommissioner.mb.ca/report17.pdf>).
- Champagne, Maurice. 1981. “Loi sur la Législature: modifications importantes. [1888-1980].” *Bulletin / Bibliothèque de la Législature*. Assemblée nationale. Vol. 11, nos. 3-4.
- Nadeau, Micheline. 1984. “Évolution de l’indemnité parlementaire (1868-1984).” *Bulletin / Bibliothèque de la Législature*. Assemblée nationale. Vol. 14, no. 4.
- L’Heureux-Dubé Claire. 2013. *Le député au cœur de notre démocratie. Pour une rémunération juste et équitable*. Comité consultatif indépendant sur les conditions de travail et le régime de retraite des membres de l’Assemblée nationale. Quebec: Assemblée nationale. (<https://www.assnat.qc.ca/fr/document/83391.html>).
- Paquin, Magali. 2014. “L’indemnité parlementaire au Québec Seconde partie : de 1867 à 2014.” *Bulletin / Bibliothèque de la Législature*. Assemblée nationale. Vol. 43, no. 1.
- Fleming, Robert J. and Clenn, J. E., eds. Various Years. *Fleming’s Canadian Legislatures*. Toronto: University of Toronto Press.
- Quebec National Assembly. December 18, 1982. *Journal of Debates* 32nd Legislature, 3rd Session (November 9, 1981 - March 10, 1983: Fascicule n°105): 7515-7753.

Pre-treatment trends in retirement

Our baseline result is that the introduction of defined-benefits pensions increased the propensity of incumbents to stand for re-election. One concern is that this result reflects a trend that was underway well before DB pensions were introduced in these legislatures. To evaluate this possibility we computed the percentage of incumbents seeking re-election in these legislatures at elections in the 1920s and 1930s.² These percentages are shown in Table [A.2](#).

² We chose this time period, rather than the 1940s because the war altered the conduct of elections. Many provinces, for example, stipulated that sitting MPs who were affiliated with the

Table A.2. Percentage of incumbent MPs seeking re-election at elections in the 1920s and 1930s.

HOC	1921-25 70.0	1925-26 96.3	1926-30 84.5	1930-35 72.2
SK	1921-25 80.0	1925-29 66.1	1929-34 70.0	1934-38 74.1
BC	1920-24 78.7	1924-28 72.4	1928-33 50.0	1933-37 78.7
ON	1923-26 72.4	1925-29 83.6	1929-34 65.4	1934-37 80.5
MB	1920-22 72.7	1922-27 72.7	1927-32 81.8	1932-36 74.5
QC	1919-23 73.4	1923-27 84.2	1927-31 76.2	1931-35 78.3

Notes: The table shows the percentage of incumbent MPs who sought re-election at a given election in each legislature. The top-left cell, for example, indicates that 70 percent of incumbents in the federal House of Commons in the 1921-25 term stood for re-election in 1925. Incumbents who died in office during these terms are excluded.

In no legislature of this era was the percentage of incumbents seeking re-election monotonically increasing. The percentage of incumbents seeking re-election varies between 65-85 percent, with two outliers: the 1926 federal election, where 96.3 percent of incumbents stood for re-election (reflecting the short duration of a minority parliament); and the 1933 BC election, where only 50 percent of incumbents sought re-election.

The number of incumbents seeking re-election tends to hover around a stable average, which is also similar across all legislatures. With the two outlier elections removed, the averages for all legislatures over the elections shown in Table [A.2](#) are between 72.5 and 78.0 percent. This allays the concern that the increased propensity of incumbents to stand for re-election might have been underway before the introduction of DB pensions.

Robustness Tests

MP Fixed Effects

Table [A.3](#) below replicates the analyses shown in Table 3 when controlling for MP fixed effects. Variables that do not vary by MP fall out of the analysis as do the records of incumbents who stood for re-election just once. The coefficients reported in Table [A.3](#) resemble those shown in Table 3 in both sign and magnitude, albeit with consistently larger standard errors than those reported in Table 3 (a function of relying solely on within-MP variation). These results continue to

armed forces were to be elected by acclamation. And there was just one election after the war before the federal House of Commons adopted DB pensions.

show that the baseline effect of DB pensions is to make MPs more likely to seek re-election than un pensioned MPs (see Specifications 1 and 2), and that this baseline effect is undone by generous accrual rates and immediate eligibility rules (see Specifications 4 through 7).

We caution, however, that the substantive interpretation of these results is quite different than of those in Table 3. The addition of MP fixed effects means that the coefficients reported in Table [A.3](#) cannot be interpreted as difference-in-difference results, i.e., as measuring the impact of differing pension arrangements on the re-election decisions of otherwise identical MPs at the same time point in their careers. Instead, the coefficients below indicate the marginal effect of a change in pension arrangements on a given MP at two time points in that same MP's career. Such estimates may mislead because any variable that varies monotonically with time will be (spuriously) correlated to the MP's decision to retire at the end of their career.

Table A.3. Linear probability models of the effect of legislative pension plans on incumbents' propensity to seek re-election controlling for MP fixed effects.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	All MPs			MPs enrolled in DB Pensions			
<i>DC Pension</i>	.013 (.059)	.013 (.059)					
<i>DB Pension</i>	.086 (.071)	.095 (.071)					
<i>Vested</i>		-.017 (.014)	-.021 (.015)				
<i>Immediate</i>				-.074*** (.017)			-.134 (.085)
<i>Delayed</i>				.035** (.016)			.020 (.090)
<i>Accrued</i>					-.244*** (.055)		
<i>Accrued × Immediate</i>						-.299*** (.055)	
<i>Accrued × Delayed</i>						-.035 (.065)	
<i>Rate (%)</i>							-.179*** (.056)
<i>Service × Rate</i>							-.001 (.006)
<i>Service × Immediate</i>							-.011

							(.015)
<i>Rate × Immediate</i>							.057*
							(.032)
<i>Service × Rate × Immediate</i>							-.002
							(.006)
<i>Service × Delayed</i>							-.017
							(.016)
<i>Rate × Delayed</i>							.025
							(.041)
<i>Service × Rate × Delayed</i>							.002
							(.006)
<i>Service (Years)</i>	-.038***	-.038***	-.031***	-.030***	-.022***	-.021***	-.012
	(.004)	(.004)	(.004)	(.004)	(.005)	(.005)	(.016)
<i>Salary</i>	.029***	.030***	.030***	.028***	.030***	.029***	.021***
	(.007)	(.008)	(.007)	(.008)	(.007)	(.008)	(.008)
<i>Margin</i>	.062	.063	.041	.030	.037	.021	.023
	(.040)	(.040)	(.045)	(.045)	(.045)	(.045)	(.045)
<i>Office</i>	.078***	.078***	.116***	.109***	.116***	.109***	.108***
	(.023)	(.023)	(.025)	(.025)	(.025)	(.025)	(.025)
<i>Government</i>	-.013	-.013	-.010	-.009	-.010	-.008	-.005
	(.012)	(.012)	(.013)	(.013)	(.013)	(.013)	(.013)
<i>Office × Government</i>	.040	.040	.004	.007	.003	.004	.005
	(.026)	(.026)	(.029)	(.028)	(.029)	(.029)	(.028)
<i>Past Office</i>	.099***	.100***	.095***	.093***	.097***	.092***	.090***
	(.019)	(.019)	(.023)	(.023)	(.023)	(.022)	(.023)
Adj. R squared	.35	.35	.37	.38	.37	.38	.38
N	8,858	8,858	6,701	6,701	6,672	6,672	6,701

Notes: The dependent variable is a dummy variable indicating the MP sought re-election at the general election in year t (1) or did not (0). MPs who died in office or were expelled from the legislature for legal reasons are omitted. Main cell entries are regression coefficients, with Huber-White heteroscedasticity consistent standard errors in parentheses. All models include legislature, year, legislature-year, and MP fixed effects. The MP's sex and entry age do not appear in these specifications because they are collinear with the MP fixed effects. For similar reasons, MPs who sought re-election just once fall out of this analysis. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Standard Errors Clustered by MP

As we noted in the main text, each MP contributes an average of just 2.8 re-election decisions to the data set, and for that reason we do not cluster standard errors by MP. Nonetheless, there are good reasons for arguing that an MP's re-election decision at time 2 is correlated to their prior re-election

decision at time 1, either directly or via changes in other regressors. Table [A.4](#) repeats the analyses contained in Table 3, but with the standard errors clustered by MP. There is little substantive change to our results.

Table A.4. Linear probability models of the effect of legislative pension plans on incumbents' propensity to seek re-election with standard errors clustered by MPs.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>DC Pension</i>	.108*	.103*					
	(.059)	(.059)					
<i>DB Pension</i>	.111**	.130***					
	(.049)	(.049)					
<i>Vested</i>		-.041***	-.025*				
		(.012)	(.013)				
<i>Immediate</i>				-.049***			.000
				(.014)			(.067)
<i>Delayed</i>				.003			.008
				(.016)			(.076)
<i>Accrued</i>					-.211***		
					(.048)		
<i>Accrued × Immediate</i>						-.220***	
						(.049)	
<i>Accrued × Delayed</i>						-.110**	
						(.056)	
<i>Rate (%)</i>							-.149***
							(.034)
<i>Service × Rate</i>							-.011***
							(.004)
<i>Service × Immediate</i>							-.044***
							(.012)
<i>Rate × Immediate</i>							.000
							(.024)
<i>Service × Rate × Immediate</i>							.013***
							(.004)
<i>Service × Delayed</i>							-.040***
							(.013)
<i>Rate × Delayed</i>							.017
							(.034)

<i>Service × Rate × Delayed</i>							.012** (.005)
<i>Service</i>	-.014*** (.001)	-.012*** (.001)	-.014*** (.001)	-.013*** (.001)	-.007*** (.002)	-.007*** (.002)	.026** (.012)
<i>Entry Age</i>	-.004*** (.000)	-.004*** (.000)	-.005*** (.001)	-.004*** (.001)	-.005*** (.001)	-.004*** (.001)	-.004*** (.001)
<i>Salary</i>	.028*** (.007)	.028*** (.007)	.028*** (.007)	.027*** (.007)	.029*** (.007)	.028*** (.007)	.032*** (.007)
<i>Margin</i>	.107*** (.023)	.111*** (.023)	.082*** (.026)	.085*** (.026)	.085*** (.026)	.083*** (.026)	.080*** (.026)
<i>Sex</i>	-.012 (.012)	-.012 (.012)	-.013 (.014)	-.013 (.014)	-.013 (.014)	-.012 (.014)	-.012 (.014)
<i>Office</i>	.043** (.019)	.043** (.019)	.085*** (.020)	.084*** (.020)	.087*** (.021)	.087*** (.021)	.086*** (.021)
<i>Government</i>	-.038*** (.008)	-.038*** (.008)	-.024*** (.009)	-.025*** (.009)	-.025*** (.009)	-.025*** (.009)	-.024*** (.009)
<i>Office × Government</i>	.012 (.022)	.013 (.022)	-.027 (.023)	-.027 (.023)	-.029 (.024)	-.030 (.024)	-.030 (.024)
<i>Past Office</i>	.033** (.013)	.034*** (.013)	.034** (.016)	.033** (.016)	.033** (.016)	.032* (.016)	.034** (.016)
Adj. R squared	.23	.23	.26	.26	.26	.26	.27
N Obs	10,030	10,030	7,644	7,644	7,620	7,620	7,644
N Clusters	3,702	3,702	2,825	2,825	2,825	2,825	2,825

Notes: The dependent variable is a dummy variable indicating the MP sought re-election at the general election in year t (1) or did not (0). MPs who died in office or were expelled from the legislature for legal reasons are omitted. Main cell entries are regression coefficients, with heteroscedasticity consistent standard errors clustered by MP in parentheses. All models include legislature, year, legislature-year, and province fixed effects. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Logistic Regression

We re-estimated the models reported in Table 3 using logistic regression in place of linear regression. The resulting estimates (see Table A.5 below), are substantively similar to those reported in the main text. Converting some of these coefficients to odds ratios gives a sense of how powerful the effects of legislative pension arrangements are on incumbent MPs' re-election decisions. Exponentiating the DB coefficient in Specification 1, for example, returns an odds ratio of 3.23. This indicates that the odds of incumbent MPs enrolled in DB pension plans seeking re-election are 3.2 times greater than those of MPs without pensions.

Table A.5. Logistic regression models of the effect of legislative pension plans on incumbents' propensity to seek re-election with standard errors clustered by MPs.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	All MPs			MPs enrolled in DB Pensions			
<i>DC Pension</i>	1.066** (.515)	-1.246*** (.174)					
<i>DB Pension</i>	1.171*** (.453)	-.654*** (.176)					
<i>Vested</i>		-.647*** (.084)	-.391*** (.115)				
<i>Immediate</i>				-.491*** (.123)			-.675 (.704)
<i>Delayed</i>				-.237* (.137)			-.634 (.935)
<i>Accrued</i>					-1.806*** (.308)		
<i>Accrued × Immediate</i>						-1.805*** (.308)	
<i>Accrued × Delayed</i>						-1.730*** (.469)	
<i>Rate (%)</i>							-1.904*** (.559)
<i>Service × Rate</i>							-.113** (.054)
<i>Service × Immediate</i>							-.312** (.145)
<i>Rate × Immediate</i>							.138 (.282)
<i>Service × Rate × Immediate</i>							.119** (.055)
<i>Service × Delayed</i>							-.325** (.153)
<i>Rate × Delayed</i>							.421 (.455)
<i>Service × Rate × Delayed</i>							.107* (.062)
<i>Service (Years)</i>	-.115*** (.006)	-.077*** (.005)	-.114*** (.008)	-.107*** (.009)	-.062*** (.013)	-.062*** (.013)	.198 (.142)

<i>Entry Age</i>	-.045*** (.004)	-.035*** (.003)	-.050*** (.005)	-.045*** (.005)	-.050*** (.005)	-.050*** (.005)	-.047*** (.005)
<i>Salary (\$1,000s)</i>	.302*** (.057)	.000 (.001)	.310*** (.057)	.308*** (.057)	.321*** (.059)	.320*** (.059)	.349*** (.056)
<i>Margin</i>	1.002*** (.233)	.859*** (.192)	.785*** (.259)	.810*** (.260)	.845*** (.262)	.845*** (.262)	.809*** (.264)
<i>Sex</i>	-.113 (.097)	-.160* (.084)	-.104 (.109)	-.103 (.109)	-.118 (.110)	-.117 (.110)	-.097 (.111)
<i>Office</i>	.321* (.172)	.236* (.143)	.755*** (.203)	.759*** (.205)	.783*** (.211)	.784*** (.211)	.777*** (.205)
<i>Government</i>	-.334*** (.076)	-.273*** (.061)	-.206** (.087)	-.211** (.087)	-.214** (.088)	-.214** (.088)	-.216** (.088)
<i>Office × Government</i>	.144 (.202)	.225 (.168)	-.279 (.242)	-.285 (.243)	-.322 (.248)	-.324 (.248)	-.302 (.245)
<i>Past Office</i>	.257** (.101)	.184** (.083)	.254** (.124)	.254** (.124)	.248** (.122)	.248** (.122)	.247* (.123)
Pseudo R squared	.15	.07	.17	.17	.17	.17	.18
N	9,482	10,095	7,244	7,244	7,221	7,221	7,244

Notes: The dependent variable is a dummy variable indicating the MP sought re-election at the general election in year t (1) or did not (0). MPs who died in office or were expelled from the legislature for legal reasons are omitted. Main cell entries are logistic regression coefficients, with heteroscedasticity consistent standard errors in parentheses. All models include legislature, year, legislature-year, and province fixed effects. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Quebec as the Control

We argued in the text that a comparison of federal MPs to provincial MPs from the same province provides the best apples-to-apples comparison of the propensity to seek re-election conditional on the MP's pension arrangements. The virtue of this comparison is that it holds constant the voters who elect and defeat these MPs. We nonetheless recognize that there exist significant differences between federal and provincial electoral regimes and party systems. Given such differences, it may be more appropriate to estimate the effect of pensions on re-election seeking by comparing provincial MPs who experienced changes to their pension regimes to provincial MPs who did not. We consider this alternative by dropping federal MPs from the analysis shown in Table A.6 and using Quebec MPs as controls in their place. Province fixed effects are necessarily omitted from this analysis because the intention is to compare MPs across not within provinces.

The coefficient estimates in Table A.6 closely resemble those in Table 3. For example, the coefficient for DB pensions in Specification 1 is .10 in Table A.6 as compared to .11 in Table 3—and with very similar standard errors. In some cases, the magnitude of a coefficient declines and its standard error increases (because Table A.6 is based on fewer cases), but in manner that leaves both the statistical significance and substantive interpretation of our results intact. The coefficient on *Accrued* in Specification 5, for example, declines in magnitude from -.21 in Table 3 to -.157 in Table A.6, but substantive effect remains the same: the greater the rate at which MPs’ pensions accrue value, the less likely MPs are to seek re-election. We conclude that our results are robust to the baseline that we use to benchmark the treatment effect of changes in legislative pension regimes.

Table A.6. Linear probability models of the effect of legislative pension plans on incumbents’ propensity to seek re-election, excluding federal MPs, and using Quebec MPs as controls.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	All MPs			MPs enrolled in DB Pensions			
<i>DC Pension</i>	.113*	.109*					
	(.059)	(.059)					
<i>DB Pension</i>	.103**	.117**					
	(.049)	(.050)					
<i>Vested</i>		-.030*	-.018				
		(.015)	(.017)				
<i>Immediate</i>				-.054**			.017
				(.022)			(.092)
<i>Delayed</i>				-.001			-.027
				(.017)			(.091)
<i>Accrued</i>					-.157***		
					(.056)		
<i>Accrued × Immediate</i>						-.157***	
						(.056)	
<i>Accrued × Delayed</i>						-.085	
						(.076)	
<i>Rate (%)</i>							-.148***
							(.036)
<i>Service × Rate</i>							-.012**
							(.005)
<i>Service × Immediate</i>							-.043**
							(.018)
<i>Rate × Immediate</i>							-.040

							(.030)
<i>Service × Rate × Immediate</i>							.016***
							(.006)
<i>Service × Delayed</i>							-.037**
							(.019)
<i>Rate × Delayed</i>							.023
							(.035)
<i>Service × Rate × Delayed</i>							.012**
							(.006)
<i>Service (Years)</i>	-.014***	-.013***	-.013***	-.011***	-.008***	-.009***	.023
	(.001)	(.001)	(.001)	(.002)	(.002)	(.002)	(.018)
<i>Entry Age</i>	-.004***	-.004***	-.005***	-.004***	-.005***	-.004***	-.004***
	(.001)	(.001)	(.001)	(.001)	(.001)	(.001)	(.001)
<i>Salary (\$1,000s)</i>	.028***	.028***	.028***	.028***	.029***	.028***	.033***
	(.006)	(.006)	(.006)	(.006)	(.006)	(.006)	(.006)
<i>Margin</i>	.114***	.116***	.080*	.084**	.084**	.084**	.091**
	(.035)	(.035)	(.042)	(.042)	(.042)	(.042)	(.042)
<i>Sex</i>	-.012	-.012	-.011	-.011	-.011	-.011	-.011
	(.015)	(.015)	(.017)	(.017)	(.017)	(.017)	(.017)
<i>Office</i>	.044**	.045**	.090***	.090***	.091***	.091***	.094***
	(.020)	(.020)	(.021)	(.021)	(.021)	(.021)	(.021)
<i>Government</i>	-.035***	-.035***	-.011	-.012	-.012	-.011	-.013
	(.012)	(.012)	(.015)	(.015)	(.015)	(.015)	(.015)
<i>Office × Government</i>	-.001	-.002	-.048*	-.050*	-.050*	-.052*	-.056**
	(.025)	(.025)	(.028)	(.028)	(.028)	(.029)	(.028)
<i>Past Office</i>	.072***	.073***	.094***	.093***	.093***	.092***	.095***
	(.014)	(.014)	(.019)	(.019)	(.019)	(.019)	(.019)
Adj. R squared	.25	.25	.29	.29	.30	.30	.30
N	6,025	6,025	4,062	4,062	4,038	4,038	4,062

Notes: The dependent variable is a dummy variable indicating the MP sought re-election at the general election in year t (1) or did not (0). MPs who died in office or were expelled from the legislature for legal reasons are omitted. Federal MPs are also omitted from this analysis. Main cell entries are regression coefficients, with Huber-White heteroscedasticity consistent standard errors in parentheses. All models include legislature, year, and legislature-year fixed effects. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.